Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A rotation angle detecting apparatus, comprising:

a reference signal-generating device that generates a reference signal;

a rotation angle detecting section that generates an output signal in response to the reference signal;

a feedback control section that determines a rotational angular speed based on the output signal and performs feedback control to calculate a rotation angle; and

a free-running range change device that narrows a free-running range of the rotational angular speed at a time of starting settling of the rotation ~~angle.~~angle,

wherein the feedback control section performs the feedback control with a predetermined resolution, and the free-running range change device makes a resolution at the time of starting settling of the rotation angle higher than the given resolution of the feedback control section.

2. (Original) The rotation angle detecting apparatus of claim 1, wherein the free-running range is made narrower than a given free-running range of the feedback control section.

3. (Canceled).

4. (Currently Amended) The rotation angle detecting apparatus of ~~claim 3,~~claim 1, wherein the free-running range change device lowers the resolution after the settling of the rotation angle has been started.

5. (Original) The rotation angle detecting apparatus of claim 1, wherein the free-running range change device makes the free-running range of the rotational angular speed

narrower than a given free-running range of the feedback control section when a power source of the reference signal-generating device is turned on.

6. (Original) The rotation angle detecting apparatus of claim 1, wherein the free-running range change device has a power source abnormality judging section for judging whether an abnormal condition has occurred in a power source of the reference signal-generating device, and the free-running range change means makes the free-running range of the rotational angular speed narrower than a given free-running range of said feedback control section in a case where an abnormal condition has occurred in the power source.

7. (Original) The rotation angle detecting apparatus of claim 1, wherein the feedback control section comprises:

a control deviation calculating device that calculates a control deviation based on the output signal; and

a settling completion judging device that judges the settling of the rotation angle to have been completed in a case where the control deviation is not more than a threshold.

8. (Original) The rotation angle detecting apparatus of claim 1, further comprising a rotation angle setting device that uses, as a reference location, the rotation angle at a time of judging the settling of the rotation angle to have been completed and setting a rotation angle.

9. (Currently Amended) A method of detecting a rotation angle, comprising:

generating a reference signal;

generating an output signal in response to the reference signal;

performing feedback control based on the output ~~signal;~~ signal to calculate ~~calculating~~ a rotation angle; and

~~making~~ narrowing a free-running range of a rotational angular speed at a time of starting settling of the rotation ~~angle~~ angle, ~~narrower than a given free-running range in the feedback control.~~

wherein the feedback control is performed with a predetermined resolution, and a resolution at the time of starting settling of the rotation angle is made higher than the given resolution of the feedback control.

10. (New) The method of detecting a rotation angle of claim 9, wherein the free-running range is made narrower than a given free-running range of the feedback control.

11. (New) The method of detecting a rotation angle of claim 9, wherein the resolution is lowered after the settling of the rotation angle has been started.

12. (New) The method of detecting a rotation angle of claim 9, wherein the free-running range of the rotational angular speed is made narrower than a given free-running range of the feedback control when a power source that generates the reference signal is turned on.

13. (New) The method of detecting a rotation angle of claim 9, further comprising:

judging whether an abnormal condition has occurred in a power source that generates the reference signal, and

making the free-running range of the rotational angular speed narrower than a given free-running range of said feedback control in a case where an abnormal condition has occurred in the power source.

14. (New) The method of detecting a rotation angle of claim 9, further comprising:

calculating a control deviation based on the output signal; and

judging the settling of the rotation angle to have been completed in a case where the control deviation is not more than a threshold.

15. (New) The method of detecting a rotation angle of claim 9, further comprising:

setting a rotation angle, using the rotation angle at a time of judging the settling of the rotation angle to have been complete as a reference location.